

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte R. MARK HALLIGAN and RICHARD R. WEYAND

Appeal 2007-2973
Application 10/701,889
Technology Center 3600

Decided: December 13, 2007

Before TERRY J. OWENS, MURRIEL E. CRAWFORD, and LINDA E.
HORNER, *Administrative Patent Judges*.

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DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1-52, all the claims currently pending in the application. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE and REMAND.

THE INVENTION

Appellants' claimed invention is directed to a method and apparatus for discovering trade secrets of an organization (Spec. 11:9-10). Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method of discovering trade secrets of an organization, such method comprising the steps of:

collecting sets of descriptive information about potential trade secrets through an input device of a computer from a plurality of persons of the organization into a database of the computer;

the computer analyzing the collected sets [of] descriptive information about potential trade secrets using logical and mathematical formulae to identify and eliminate any redundancy among the sets of descriptive information about potential trade secrets to define a collection of descriptive information about potential trade secrets of the organization; and

the computer generating a report containing the non-redundant descriptive information about potential trade secrets of the organization.

THE REJECTION

The Examiner relies upon the following evidence in the rejections:

Jacobson	US 6,167,397	Dec. 26, 2000
Katz	US 2003/0158745 A1	Aug. 21, 2003

The following rejection is before us for review:

Claims 1-52 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Katz and Jacobson.

ISSUE

Appellants contend that “neither Katz nor Jacobsen [*sic*], either alone or in combination, teach or suggest the elimination of redundant or identical entries” (Appeal Br. 10 & 15). The Examiner held that it would have been obvious “to include the elimination of redundancy via the clustering of documents in Katz et al, as seen in Jacobson et al, as an efficient means of searching in a set of structured documents” (Answer 4). The issue before us is whether the clustering of documents, as taught by Jacobson, is equivalent to identifying and eliminating redundancy, as recited in claim 1.

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1.The customary meaning of the term eliminate is to cast out or to get rid of, i.e., remove, eradicate *Merriam-Webster's Collegiate Dictionary* 375 (10th ed. 1999).

2.Appellants' Specification does not specifically define the term “eliminate.” However, the Specification contains numerous references to redundant data being condensed or integrated into a single entry (See e.g., Specification 25:3-6, 26:8-13, and Fig. 7).

3.Katz teaches a system and method for managing intellectual capital which allows a company to internally keep track of intellectual capital and to access information about intellectual capital available for licensing or purchase (Katz ¶ 1).

4.The intellectual capital includes trade secret information (Katz ¶ 34).

5.Katz fails to teach identifying and eliminating any redundancy among the sets of descriptive information about potential intellectual capital.

6.Jacobson teaches a method for clustering documents in answer to a query and joining those documents that share infrequently occurring terms (Jacobson, col. 1, ll. 58-60).

7.The method provides a ranked list of document clusters rather than individual documents in response to a query (Jacobson, col. 1, ll. 61-63).

8.Each document returned by the search as part of the answer list is required to match some or all of the query words and hence would have been part of the list of documents returned by the traditional approach (Jacobson, col. 1, ll. 63-67).

9.Jacobson does not disclose that in clustering the documents, any documents are eliminated. Therefore, Jacobson does not disclose identifying and eliminating any redundancy in the document list.

10.Appellants admit that the elimination of redundancy in databases, for example, those containing contact information, is known in the art (Appeal Br. 8).

PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains.” *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S.Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”) The Court in *Graham* further noted that evidence of secondary considerations “might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” 383 U.S. at 17-18.

In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious. In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *KSR*, 127 S.Ct. at 1739 (citing *Graham*, 383 U.S. at 12 (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* The Court explained:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same

reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

Id. at 1740. The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

The Supreme Court stated that “[f]ollowing these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement.” *Id.* The Court explained,

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

Id. at 1740-41. The Court noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter

of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.*

ANALYSIS

In order to determine the patentability of independent claims 1 and 27 over the cited prior art, the claims must be interpreted to ascertain their proper scope and/or meaning. In interpreting claim language, we apply the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). *See also In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) and *In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983). Independent claims 1 and 27 each recite “analyzing the collected sets [of] descriptive information about potential trade secrets using logical and mathematical formulae to identify and eliminate any redundancy among the sets of descriptive information about potential trade secrets to define a collection of descriptive information about potential trade secrets of the organization.” Accordingly, in order to render claims 1 and 27 unpatentable, the prior art must “identify and eliminate any redundancy.”

Appellants contend that to identify and eliminate redundancies requires that information identified as redundant, i.e., in excess of what is necessary, be removed, because (1) “Applicant’s disclosure makes clear that the elimination of redundancy means the reduction of multiple descriptions of any single trade secret

to a single description of each trade secret” (Appeal Br. 10), and (2) the dictionary definition of eliminate is “to get rid of; to remove” (Appeal Br. 11). We agree.

Although Appellants’ Specification does not specifically define the term “eliminate,” the Specification contains numerous references to redundant data being condensed or integrated into a single entry (Finding of Fact 2). Accordingly, we find that the term “eliminate,” as customarily defined (Finding of Fact 1) and consistent with its use in the Specification, means to remove or eradicate.

Katz teaches a system and method for managing intellectual capital which allows a company to internally keep track of intellectual capital, including trade secret information, and to access information about intellectual capital available for licensing or purchase (Finding of Facts 3 & 4). Katz fails to teach identifying and eliminating any redundancy among the sets of descriptive information about potential intellectual capital (Finding of Fact 5).

Jacobson teaches a method for clustering documents in answer to a query and joining those documents that share infrequently occurring terms (Finding of Fact 6). The clustering method provides a ranked list of document clusters rather than individual documents in response to a query (Finding of Fact 7). Jacobson does not disclose that in clustering the documents, any documents are eliminated (Finding of Fact 9). To the contrary, Jacobson teaches that each document returned by the search as part of the answer list is required to match some or all of the query words and hence would have been part of the list of documents returned by the traditional approach (Finding of Fact 8). Therefore, Jacobson does not disclose eliminating redundancy in the document list (Finding of Fact 9). As such

we cannot sustain the Examiner's rejection of independent claims 1 and 27, or claims 2-26 and 28-52, which depend therefrom, as unpatentable over Katz and Jacobson.

REMAND

We remand this application to the Examiner for reconsideration, in view of our claim interpretation discussed *supra*. More specifically, we remand this application to the Examiner for consideration of whether it would have been obvious to modify the art of record to utilize the method of eliminating redundancy in a database by removing or deleting redundant entries, admitted by Appellants to be known in the art (Finding of Fact 10), and whether such modification renders claims 1-52 unpatentable. *See e.g., KSR*, 127 S.Ct. at 1740 (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”)

Appellants contend that the present invention “is distinguished from prior art that eliminates redundancy in other types of databases because the claimed invention operates without any need for the unique identifiers that simplify identifying duplicate or redundant entries and eliminating the redundancy in the other types of databases” (Appeal Br. 9). However, we note that at least independent claim 1 does not recite any of the features of the present invention which allow it to operate without the need for unique identifiers. Further, we suggest that the Examiner determine, if he has not done so already, whether any

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such prior art systems that eliminate redundancies in databases operate without the requirement of a unique identifier.

CONCLUSIONS OF LAW

We conclude Appellants have shown that the Examiner erred in rejecting claims 1-52 under 35 U.S.C. § 103(a) as unpatentable over Katz and Jacobson.

DECISION

The Examiner's decision to reject claims 1-52 is reversed. The application is remanded to the Examiner pursuant to 37 C.F.R. § 41.50(a)(1) (2007) for further consideration of a rejection. If a Supplemental Examiner's Answer is written in response to this remand, the provisions of 37 C.F.R. § 41.50(a)(2) apply.

REVERSED and REMANDED

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